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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/832,875	04/12/2001	Timothy R. Brumleve	ADV08 675	1385

7590

05/07/2003

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EXAMINER

RAMSEY, KENNETH J

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/832,875

Applicant(s)

BRUMLEVE ET AL.

Examiner

Kenneth J. Ramsey

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2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-33 and 44-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 and 44-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other:

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-26, 33 and 44-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over van der Wolf et al (3,957,328) in view of Anderson (4,449,948). Van der Wolf discloses the step of providing an amalgam at a location within an exhaust tube heating the amalgam to cause mercury vapor to fill the lamp vessel and sealing off the non-mercury component of the amalgam from the lamp vessel by separating the exhaust tube stem from the lamp vessel at a point between the amalgam body and the lamp vessel. Van der Wolf et al differs from the claim invention in that a molten amalgam is used as the mercury carrier. The alleged advantage of van der Wolf is that since the amalgam alloy is not placed within the tube the vapor pressure of the mercury

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is less responsive to changes in temperature of the lamp. Anderson column 1, lines 44-68 teaches that it is difficult to readily dispense a proper dosage of amalgam in a molten form which results in a excessive amount of amalgam being used to provide a sufficient dosage. Anderson teaches solid amalgam pellets, one or more of which can be provided within a lamp to accurately provide the dosage of the lamp. It would have been obvious to one of ordinary skill in the art that the essentially all of the amalgam of van der Wolf can be driven into the lamp by heating the exhaust tube to a set temperature. Thus the more accurate the dosage of amalgam in the exhaust tube, the more accurate the dosage in the lamp. Likewise it is apparent that a controlled amount of amalgam can be driven from the pellets of Anderson by heating to a set temperature. Thus the teaching of Anderson of providing one or more controlled dosages of mercury in solid pellet form is clearly applicable to the disclosure of van der Wolf and it would have been obvious to one of ordinary skill in the art to provide the amalgam of van der Wolf in the form of pellets whereby the dosage can be more accurately controlled. As to Claims 2-12, 17-20, 23, 50 and 51, the applicants have not challenged the examiner's statement that the specific forms of the amalgam and the temperature at which the amalgam is released are well known in the art and it would have been obvious to select an optimum type and amount of amalgam as determined by the specific application of the lamp. Therefore, the same is admitted prior art. As to claims 13, 14, 31 and 32, the time of heating is readily determined by the parameters of the lamp and dosage composition and are obviously determined by routine procedure upon selection of a known application of the lamp, MPEP. 2144.05. As to claim 33 and dependent claims,

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it is well known to form a lamp body with an extended exhaust tube which is open to the atmosphere and to introduce the fill materials through the open end of the exhaust tube, as to the limitation of sealing the open end of the exhaust tube prior to heating the amalgam, such is obviously required in order to prevent dangerous release of mercury vapor. As to claims 48-49, glass, quartz and ceramic are well known materials for forming mercury lamp vessels and it would have been obvious to form the dispenser portion of the same material as the lamp body since like components can be more readily joined or made as one body.

4. Claims 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over van der Wolf et al and Anderson as applied to claims 1-26 above, and further in view of Hansler et al. While van der Wolf recognizes the need to heat the lamp vessel prior to introducing the mercury vapor and protecting the mercury from the high temperatures of the lamp, there is no teaching of waiting until after a heat treatment of the lamp vessel to position the amalgam in its place near to the lamp body. However, this expedient would have been obvious to one of ordinary skill; for instance, the patent to Hansler et al teaches heat treating the lamp body at Figure 11 to remove moisture prior to positioning the mercury.

5. Applicant's arguments filed 1/24/03 have been fully considered but they are not persuasive. Applicants argued that the primary reference teaches away from the invention and that there is no motivation to combine the reference teachings. Applicants arguments are unpersuasive in view of the strong motivation to combine the teachings of the references as set forth by the examiner, which motivation has been

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clearly explained in the rejection but ignored in applicants' response. While applicants are correct that the primary reference teaches away from the claimed invention, that fact is clearly muted by the requirement to provide an accurate mercury dosage in the lamp and Anderson's teaching that an accurate dosage can be best obtained by dispensing the mercury in the form of carefully metered pellets of amalgam rather than as a liquid which is difficult to dispense in a controlled amount. Since the mercury and not the amalgam is dosed into the lamp, the purpose of van der Wolf is not destroyed, but is actually followed. The examiner's reliance upon the Anderson patent to modify the van der Wolf teaching is thus clearly sound.

6. Any reference which does not anticipate the claimed but instead teaches an alternative way to obtain the purpose of applicants invention can be said to be a teaching away from the claimed invention in some way or another. However, to base patentability upon the mere fact that applicant has disclosed a novel way of obtaining a prior result is contrary to the provisions of 35 U.S.C. 103.

7. As to the rejection of claims 27-32, the applicants comments are not understood since the heat treatment of Hansler to remove moisture is clearly before placing the mercury at a position where it would be vaporized by the heat treatment.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

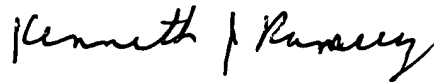
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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

#### Directions for Responses

Any formal response to this communication should be directed to examiner Kenneth Ramsey, Art Unit 2879, and either  
faxed to: 703-872-9319; or mailed to: Box AF  
Assistant Commissioner For Patents  
Washington, D.C. 20231

Technical inquiries concerning this communication should be directed to Kenneth J. Ramsey, (703) 308-2324 (voice), (703) 746-4832 (fax).



Kenneth J. Ramsey  
Primary Examiner  
Art Unit 2879